

IN THE CLAIMS

Please cancel claim 1 and substitute the following claim 2 therefor, and add the following claims 3 - 18 to the case.

- 1 2 (new). A water purification system comprising:
 - 2 an integral, compact enclosure containing a plurality of vertically
 - 3 oriented, serially coupled compartments configured to direct a flow of water
 - 4 alternately in upward and downward directions, with a first of said
 - 5 compartments having a water inlet and a last of said compartments having a
 - 6 water outlet, each said compartment extending the full vertical dimension of
 - 7 said enclosure,
 - 8 a venturi coupled to said water inlet, said flow of water passing
 - 9 through said venturi,
 - 10 an ozone generator in one of said compartments downstream from
 - 11 said venturi and further comprising:
 - 12 an ultraviolet lamp positioned in a watertight housing located
 - 13 in one of said compartments, with walls of said watertight housing transparent
 - 14 to ultraviolet radiation from said ultraviolet lamp,
 - 15 an air entrance in said watertight housing and an ozone/air
 - 16 outlet in said watertight housing, said ozone/air outlet coupled to provide
 - 17 ozone to said venturi and in turn to said flow of water.

- 1 3 (new). A water purification system as set forth in claim 2 further comprising:

2 a mixing chamber in said venturi, said mixing chamber
3 communicating with at least two suction ports and said flow of water, said
4 ozone/air outlet coupled to one of said suction ports and at least one
5 substance that reacts beneficially with ozone coupled to the other of said ports.

1 4 (new). A water purification system as set forth in claim 3 wherein said
2 mixing chamber is an annular mixing chamber surrounding said flow of water
3 and providing reaction products of said at least one substance and said ozone
4 annularly to said flow of water.

1 5 (new). A water purification system as set forth in claim 4 wherein said
2 substance is a liquid sanitizer.

1 6 (new). A water purification system as set forth in claim 2 wherein one or
2 more of said compartments contain turbulence-inducing devices.

1 7 (new). A water purification system as set forth in claim 6 wherein some of
2 said turbulence-inducing devices include alternately positioned baffles along
3 walls of at least one of said compartments to force said flow of water to flow
4 generally in back and forth relation through said at least one of said
5 compartments.

1 8 (new). A water purification system as set forth in claim 6 wherein some of

2 said turbulence-inducing devices are configured to force said flow of water to
3 flow generally spirally through a said compartment.

1 9 (new). A water purification system as set forth in claim 8 wherein said
2 housing is generally centrally located in a said compartment containing a one
3 of said turbulence-inducing devices to cause water to spiral around said
4 housing.

1 10 (new). A water purification system as set forth in claim 2 wherein a last of
2 said compartments contains de-gassing apparatus.

1 11 (new). A water purification system as set forth in claim 12 wherein said
2 compartments through which water is flowing downward are smaller in cross
3 section and said compartments through which water is flowing upward are
4 larger in cross section.

1 12 (new). A water purification system as set forth in claim 2 wherein said
2 enclosure and said vertically oriented compartments are about 18 inches in
3 height.

1 13 (new). A water purification system comprising:

2 an integrally constructed, compact housing of relatively narrow width,
3 said housing vertically divided into at least three compartments, with a water

4 inlet in a first of said compartments and a water outlet in a last of said
5 compartments, said compartments communicating with each other so that a
6 flow of water through said compartments is serial and alternates in upward
7 and downward directions,

8 an ultraviolet ozone generator having an air inlet and an ozone/air
9 outlet mounted within one of said compartments, said ozone generator
10 providing ultraviolet radiation to said flow of water,

11 a mixing device coupled to said water inlet and having a plurality of
12 inlet ports, said inlet ports communicating with a mixing chamber in said
13 mixing device, said ozone/air outlet coupled to one of said inlet ports and a
14 supply of a substance that reacts beneficially with ozone coupled to another of
15 said inlet ports.

1 14 (new). A water purification system as set forth in claim 13 wherein said
2 mixing device is a venturi, and said mixing chamber is an annular chamber
3 communicating with and surrounding said flow of water.

1 15 (new). A water purification system as set forth in claim 14 further
2 comprising turbulence-inducing devices in at least one of said compartments.

1 16 (new). A method for sanitizing water comprising:

- 2 1) mixing ozone into a flow of water,
- 3 2) directing said flow of water, in serial relation and at least once in an

4 upward direction and a downward direction, said flow of water being slower in
5 said upward direction and faster in said downward direction,

6 3) causing turbulence in said flow of water,

7 4) after the mixing of 1, the serially directing of 2 and the turbulence
8 of 3, exposing said flow of water containing residual ozone to ultraviolet
9 radiation.

1 17 (new). A method as set forth in claim 16 further comprising mixing said
2 ozone and a substance that reacts beneficially with ozone in an annular mixing
3 cavity surrounding said flow of water and providing reaction products of said
4 ozone and said substance to said flow of water.

1 18 (new). A method as set forth in claim 17 further comprising mixing said
2 ozone with at least a halogen sanitizer.